

DOCKET NO.: IBIS0002-100 (DIBIS-0003US)**PATENT****In the Claims:**

The current status of all claims is listed below and supercedes all previous lists of claims.

Please amend claims 51, 52, 55, and 58 as indicated below.

1-50 (Cancelled).

51. (Currently amended) A service for providing characterizing information about a bioagent, comprising the steps of:

a) providing a database of base composition signatures indexed to molecular masses of amplification products of known bioagents;

b) interrogating the database with an identification query comprising a measured molecular mass of a bioagent, wherein the measured molecular mass is of an ~~amplification product~~ a primer pair generated amplification product comprising a variable region that is present within a gene involved in translation, replication, recombination, repair, transcription, nucleotide metabolism, amino acid metabolism, lipid metabolism, energy generation, uptake, or secretion, and wherein the variable region is flanked by a pair of highly conserved regions to which the primer pair hybridizes; and

c) delivering a response generated by the database, wherein the response provides characterizing information for the bioagent.

52. (Currently amended) A service of claim 51 wherein the gene is DNA polymerase III beta, elongation factor TU, heat shock protein ~~geEL~~ groEL, RNA polymerase beta, phosphoglycerate kinase, ~~DADH~~ NADH dehydrogenase, DNA ligase, DNA topoisomerase, elongation factor G, or RNase P.

53. (Previously presented) A service of claim 51 wherein the gene is DNA polymerase III beta.

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54. (Previously presented) A service of claim 51 wherein the gene is elongation factor TU.
55. (Currently amended) A service of claim 51 wherein the gene is heat shock protein ~~goEL~~
groEL.
56. (Previously presented) A service of claim 51 wherein the gene is RNA polymerase beta.
57. (Previously presented) A service of claim 51 wherein the gene is phosphoglycerate kinase.
58. (Currently amended) A service of claim 51 wherein the gene is ~~DADH~~ NADH dehydrogenase.
59. (Previously presented) A service of claim 51 wherein the gene is DNA ligase.
60. (Previously presented) A service of claim 51 wherein the gene is DNA topoisomerase.
61. (Previously presented) A service of claim 51 wherein the gene is elongation factor G.
62. (Previously presented) A service of claim 51 wherein the gene is RNase P.
63. (Previously presented) A service of claim 51 wherein the response is delivered via a network.
64. (Previously presented) A service of claim 63 wherein the network is a local area network, a wide area network, or the internet.
65. (Previously presented) A service of claim 51 wherein the characterizing information comprises a genus name, a species name, or a strain name.

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66. (Previously presented) A service of claim 51 wherein the variable region exhibits no greater than about 5% identity among species.

67. (Previously presented) A service of claim 51 wherein the variable region is between about 50-250 nucleotides.

68. (Previously presented) A service of claim 51 wherein the highly conserved regions exhibit about 95% identity among species.